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ABSTRACT

For more than 5 years, Mexico's El Instituto Tecnologico y de Estudios Superiores de Monterey (ITESM) has offered distance education programs in addition to traditional face-to-face programs. ITESM has recently begun migrating to new e-learning platforms (Blackboard and Web Tec) that are more user-friendly and flexible than its previous e-platform (LearningSpace). Besides raising a number of technical issues, the migration has raised a number of educational/instructional issues. The biggest reason for the switch to new platforms was that some courses--especially those related to areas such as the social sciences, arts, and critical thinking--do not lend themselves to the LearningSpace platform, which is best suited for subjects that can be taught in a lineal and mechanical way. One big problem in the migration process has been professors' unfamiliarity with details of the new platforms' operation. Another area of concern has been that Blackboard can be too flexible and thus confusing for organizing the content of certain courses. Although Blackboard's instructional design is good for a constructivist and humanist educational approach, it is not good for a mechanical and behaviorist approach. Blackboard has also been criticized for not organizing students' assignments well and being too confusing. Nevertheless, the general consensus is that migration to new e-learning platforms will be positive for ITESM's distance education programs. (MN)

Migrating from old E-learning Platforms to new ones: A Mexican Experience

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(Abstract)

Presenting a case study from Mexico city describing the implementation of e-learning delivery platforms and the process of migrating from one old and obsolete e-learning platform (LearningSpace) to new e-learning platforms (e.g., BlackBoard and WebTec) more suitable and friendly for ITESM institutional educational purposes (the presentation will comment on pedagogical and technological problems, difficulties, constraints, and successes).

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Introduction

One of the most competitive private higher education institutions in Mexico, "El Instituto Tecnológico y de Estudios Superiores de Monterrey" (ITESM) (www.itesm.mx), has implemented for more than 5 years an instructional design e-learning platform (LearningSpace) to enhance its traditional face-to-face and distance education programs at undergraduate and graduate level (Masters and Doctoral).

Through this e-learning electronic delivery educational platform ITESM has reached all its 20 or more campuses around Mexico; allowing them delivery, currently, more than eleven thousand e-learning courses. LearningSpace is widely used both locally (each campus has certain autonomy in its use) and through the entire ITESM system.

To train almost all the students on the use of LearningSpace it has been a huge effort, but to train professors and instructors to develop their own courses using LearningSpace has been the most challenging educational experience that this educational institution has had.

This process of implementing an e-learning platform for enhancing face-to-face and distance education courses has had a lot of failures and successes, especially, those related to the instructional design structure of LearningSpace (LS), basically created to train people (workers) at a distance (in a very lineal and mechanical way), rather than to educate young-adult students in a more flexible way and based on their educational needs for higher education situations.

This is one of the reasons that ITESM has taken in to account and it has decided to migrate to new e-learning platforms more suitable, friendly, and flexible (Blackboard, V.5 and WebTec). Another important reason to substitute LearningSpace, from Lotus Notes, is that this e-learning platform became old and obsolete, with a lot of problems of reliability, dependability, and efficiency. Its license expiration date is almost over (in 2004), and Lotus Note (company) is not longer working with this E-learning platform for is updating process, and not longer it will take care of any major technical problems related to this kind of educational software after the expiration license date.

The paper has the objective to describe this experiential process to migrate from an old and obsolete e-learning platform or computer-mediated communication system (LearningSpace) to new ones (Blackboard V.5 and WebTec) with new technical and educational elements better suitable for online delivery (e.g., relaying on Internet and not in local replicas within the PC or computer equipment). The main purpose of this paper is to comment on the educational and instructional issues related to this "migrating" process rather to talk only on technical issues.

Another important problem is that LearningSpace was created based on a culture entirely different from the Latino culture of Mexico, and when it was applied without a proper cultural adaptation there was certain rejection to it by the ITESM students (specially those who did not know English). At the time of implementing LearningSpace, there weren't any e-learning

platform in Spanish in the distance education market, and ITESM decided to buy it in its English version and to implement it as part of its Educational Model named "Rediseño" (Redesign).

Specially, because English is the language used in LearningSpace (it is not translated to Spanish, ITESM uses LS in English), this situation created a lot of frustration among students and professors who did not know English or handle it poorly, beside other cultural context issues. Plus the technical problems added to the use of this kind of lineal e-learning platform that needs certain knowledge on computer expertise from the users.

Therefore, many questions came to my mind about this implementation process of E-learning platforms from other cultural context, and how a process of migrating from one e-learning platform can affect educational process either by professors and students. Questions such as: How a mechanical cultural implementation of an e-learning platform affects the learning process of distant learners? How the lack of cross-cultural sensitivity using an instructional design through e-learning platforms allows or creates barriers to the learning process at a distance? These are some of the questions that the paper will try also to talk about, beside the detailed description of ITESM case study experience using e- learning platforms.

The Migration Process from one old E-learning Platform to a new one

During the past semesters (fall 2002 and spring 2003) the ITESM System has had important advances on the implementation of its e-learning platforms within the instructional design model (*Rediseño*) that this institution of higher education is following (a combination of Behaviourist and Cognitivist educational paradigms, with certain aspects of Constructivist approach).

An important event to be commented from these advances is the migrating process from its old and obsolete first major e-learning platform (LearningSpace) to new ones (Blackboard and WebTec), better suited to fit ITESM educational needs. In August 2001 ITESM has decided to change its major e-learning platform and migrate all its electronic courses to a new and better e-learning platforms, as a way to strengthen its instructional design model. In that date ITESM has decided, also, to incorporate BlackBoard V.5, as the main e-learning platform for its educational model; and at the same time, to fortify the development of its home-made e-learning platform named WebTec (ITESM brand name e-learning platform). ITESM has developed by itself an e-learning platform named WebTec, pretty similar to Blackboard but with its own particular characteristics, hoping to substitute Blackboard in the future as the main e-learning platform for the whole ITESM-System.

The migration process has involved three phases: The first phase consisted on the selection of the best courses already accepted through the entire ITESM System as the good ones in its field or area of expertise (based on institutional rigorous requirements, e.g.: content, clarity, motivation, illustration, learning activities, evaluation processes, didactic material, and so on). This first phase was done during the academic year of 2001 and spring semester of 2002. The second phase included the best courses already approved by the institution and the new ones to be offer (those who never have been adapted to any e-learning platform). This second phase started on the fall semester of 2002 and will continue until the end of the fall semester of 2003. The third phase, and the last one, will be done in the spring semester of 2004, when all courses (old ones and new ones) will be on Blackboard and WebTec, and no longer using LearningSpace any course. LearningSpace, then, will be totally substituted by the new e-learning platforms.

This migration process has started from few courses (50) using Blackboard V.5 in the spring semester of 2001 (as an experimental phase), and 250 courses during the fall semester of 2001, to more than 10,000 course for the fall semester 2003. The same situation for WebTec e-learning platform, it started with 50 course during the spring semester of 2002, to 2200 courses for the fall semester of 2003.

The following table 1 will show the transition (migration process) experimented among the different ITESM campuses from the old e-learning platform to the new e-learning platforms (including the High School program, Undergraduate and Graduate programs). This table shows the progressive number of courses from one e-learning platform to a new one already.

Table 1: Number of Course Using the Different ITESM E-learning Platforms

E-learning Platform	Fall Semester 2001	Spring Semester 2002	Fall Semester 2002	Spring Semester 2003	fall Semester 2003*
LearningSpace	11,000	10,500	9,500	7,500	2,000
Blackboard	250	1,250	3,300	5,500	10,000
WebTec	-	50	200	350	2,200
Total	11,250	11,800	13,000	13,350	14,200

* ITESM campuses final estimation for this academic period.

In the cases of LearningSpace, and as a consequence of its obsolescence, and to avoiding any operational risk, ITESM has decided to abandon this e-learning platform in 2004, migrating to two new e-learning platforms (or computer-mediated communication systems): e.g., Blackboard (V.5) and WebTec.

Blackboard as an e-learning platform already tested at the university level, it has allowed a fast change from few courses using this platform to more than ten thousand courses for the fall semester of 2003. Currently, this e-learning platform has show its strengthen, both administratively and technologically, necessary for assure its operational reliability and service quality at academic level through the entire ITESM System.

On the other hand, WebTec has more than one year working in its experimental phase in different campuses, with important outcomes, showing its efficiency and operability. Therefore, in the fall semester of 2003 ITESM authorities made the decision to allow two thousand courses to use this e-learning platform.

Based on the results of this e-learning migration process, from one computer-mediated communication system to another one, ITESM will decide the extent of the growing process of these e-learning platforms, seeking reliability and efficiency during the operational process of these two electronic tools: Blackboard and WebTec.

Instructional Design Problems within ITESM E-learning Platforms

This process of migrating from an old e-learning platform to a new one has had a lot of successes and failures, especially, those related to the instructional design structure of LearningSpace (LS) and Blackboard (BB).

In the case of LS, some e-learning and face-to-face courses, and their academic contents, fitted well with its instructional design structure, which was basically created to train people (workers) at a distance. Those courses which their learning activities can be taught in a lineal and mechanical way (e.g., engineering courses, some business and administration courses, and so on) fit very well with LS. However, there are course where LS does not fit at all (e.g., especially courses related to social sciences, arts, critical thinking, etc.), because, rather than to educate students in a flexible way and based on their particular educational needs it pretends to educate in an automatic and massive way, not allowing space for course flexibility and reflection. This is one of the reasons that ITESM has taken in account to decide migrate to new e-learning platforms more suitable, friendly, and flexible. Another important reason to substitute LearningSpace, from Lotus Notes, is that this e-learning platform became old and obsolete, with a lot of problems of

reliability, dependability, and efficiency. Also, LearningSpace is discontinued by Lotus Note, so its technical support is almost gone to help this academic institution to resolve operating problems.

It seems that Blackboard and WebTec are more flexible in its instructional design components and structure, allowing a better usage within ITESM spectrum of diverse courses and subjects. This flexibility and less rigidity embrace more possibilities to adapt courses to these two new e-learning platforms used by professors at the ITESM.

It was not an easy process for the professors to migrate from one computer-mediated communication system to another one; because they should learn to handle it fast, to know tricks in its usage, to transfer content and to adapt themselves to the new platform with other characteristics (LearningSpace had more control on the course content, too structured within it, and Blackboard and WebTec lack of this kind of characteristics allowing more creativity in the design of the courses).

The following table 2 will show the advantages and disadvantages detected by professors using LearningSpace versus using Blackboard.

Table 2: ITESM-CCM Professors opinion on LS vs. BB

Advantage using LearningSpace	**Advantage using Blackboard**	**Disadvantage using LearningSpace**	**Disadvantage using Blackboard**
Its instructional design is good for certain type of courses that are lineal and mechanical. It organises course content clearly, although in a rigid way. It handles a large quantity of electronic documents. It organises students' assignments in a clear way.	Its instructional design is pretty flexible for different types of course. It organises course content clearly, in a flexible way. It handles a large quantity of electronic document. It is good for group discussion and student communication.	It does not fit for all kind of course content and learning activities, just for certain kind, this is a limitation. It is too rigid in its instructional design (behaviourist and cognitivist). It is not too good for student communication (it does not work well with synchronous communication, it is good for the asynchronous one).	It can be too flexible and confusing for organising course content. It fits with many kind of course content and learning activities. It is instructional design is good for constructivist and humanist educational approach, but not for a mechanical and behaviourist educational approach. It does not organise students' assignments well; it is too confusing.

*Based on Unstructured Interviews to ITESM-CCM professors and a Formal Content Analysis

Another important issue, in the implementation of new e-learning platforms, it is how institutional indicators are driven e-learning platforms within ITESM system affecting its instructional interactions at a distance (Bannan-Ritland, 2002). This institution is seeking to accomplish institutional indicators as a way to keep high academic standards. The following are some indicators in the arena of distance education used by ITESM: a) number of professors teaching classes with e-learning platforms; b) number of students using e-learning platforms; c) number of courses which meet institutional system requirements -e.g., traditional course design, spelling and grammar, images, graphics, etc.- (there are different levels or stages in using the e-learning platforms); d) number of entries into any of the e-learning platforms -e.g., few entries can mean not a good professor, thousands of entries can mean an excellent professor; e) number of times that a course has been evaluated by supervisors and passing or not this evaluation; f) average students' grade within a course, and so on.

These indicators are driven the design of the courses of this institution, also, their courses' content, their learning activities, delivery of course material, assessment and evaluation processes, in a way that make teachers forgetting many times students' educational needs and how

to interact with students, not only at a distance also at a face-to-face level. Lack of space in this short document does not allow for discussing this issue on the use or not of "*industrial or fordist*" indicators within teaching scenarios and how they affect teaching at a distance.

To accomplish higher institutional indicators ITESM instructors are pressured in a short time to use any of the e-learning platforms offered by the institution (LearningSpace, BlackBoard, or WebTec). Instructors are trained in the technical use of the electronic platform (how to use the software, the steps to follow for any instruction for the e-learning platform), but without educational and pedagogical training in distance education concepts, principles, and educational theories.

Conclusion

It was not an easy process for ITESM professors migrating from one computer-mediated communication system or e-learning platform to another new one. Professors must learn how to handle new instructions, to transfer content, image, graphics, tables, web sites addresses, electronic documents, and to adapt themselves to the new platform with other instructional design characteristics in a short time. To be used to a rigid e-learning platform and to migrate to a new one, more flexible, it has been a hard process, especially if professors do not have knowledge on instructional design, needs assessment, curriculum development, pedagogical and educational paradigms, and related issues on distance education.

Technological knowledge (to know how to use the software for computer-meditated communication) in the use of e-learning platforms is not equivalent to know how to teach and handle pedagogical and instructional issues at a distance (conditions, methods and results, Reigeluth, 1983), specially in areas of distance education interactions, too important for the success of delivery of learning activities at a distance. Distance education interactions at ITESM are minimized or not considered as important, such as: learner-instructor, learner-learner, learner-content (Moore, 1989), learner-technology (Hillman, Willis, & Gunawardena, 1994), instructor-facilitators, instructor-peers, instructor-authorities (Mortera-Gutierrez & Murphy, 1999), when they are contrasted with the ITESM institutional indicators.

In any distance education situation we need to remember that students are not electronic machines, they are humans beings with their proper educational needs and cultural contexts. E-learning platforms are useful tools to help learners to accomplish their educational and learning activities, to interact at a distance, to overcome time and space barriers, e-learning platforms do not substitute the human part of the educational process of teaching and learning.

These are some of the issues that this paper presentation will talk about during the 19th Distance Teaching and Learning Conference.

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Relationship between Distance Education Instructor's Interactions & ITESM Institutional Interactions

by

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INSTITU - TIONAL INDICA-TORS	INSTRUC-TOR - LEARNER	INSTRUC TOR - CONTENT	INSTRUC-TOR – TECHNO-LOGY	INSTRUC-TOR – FACILITAT-OR	INSTRUC-TOR - PEERS	INSTRUCTOR – SUPPORT STAFF	INSTRUCTOR - AUTHORITIES
- Number of entries to e-learning platforms per semester (LS, BB, & WebTec).	+/-	-	-	-	-	-	+
- Development of an e-learning course.	+	+	+	+	+/-	+/-	+
- Adoption of an e-learning course.	+/-	+/-	-	-	+/-	-	+
- E-Learning course certification at ITESM System level.	+/-	-	-	-	+	-	+
- Integration of a didactic technique (POL, PBL, Cooperative Work, etc.) within an e-learning course.	+	+	-	+	+	+	+
- Online deliver of grades on time.	+/-	-	-	-	-	+	+
- Control of average of grades per group each semester (no more than 90 no less than 74).	-	-	-	-	-	+	+
- Get done and complete other institutional requirements (syllabus, course agenda, course materials and update of readings).	+	+	-	+	-	+	+
- ECOAS (Encuesta de Opinion de Alumnos –in English: Students Opinion Survey).	+	-	-	+	+/-	+	+
- Professors training courses (PDHD and PCP) per semester.	+	+	+	-	-	+/-	+

Note: + = Meaningful /Important; - = No Meaningful/No Important; +/- = Depending in each e-learning situation (can be important or not).

Relationship between Distance Education Learner's Interactions & ITESM Institutional Indicators

by

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INSTITUTIONAL INDICATORS	LEARNER - INSTRUCTOR	LEARNER - LEARNER	LEARNER - CONTENT	LEARNER - TECHNOLOGY
- Number of entries to e-learning platforms per semester (LS, BB, & WebTec).	+	+	+	+/-
- Development of an e-learning course.	+	-	-	-
- Adoption of an e-learning course.	+/-	-	-	-
- E-Learning course certification at ITESM System level.	+/-	-	-	-
- Integration of a didactic technique (POL, PBL, Cooperative Work, etc.) within an e-learning course.	+	+	+	-
- Online deliver of grades on time.	+	-	-	-
- Control of average of grades per group each semester (no more than 90 no less than 74).	-	-	-	-
- Get done and complete other institutional requirements (syllabus, course agenda, course materials and update of readings).	+/-	+/-	+	-
- ECOAS (Encuesta de Opinion de Alumnos –in English: Students Opinion Survey).	+/-	+/-	-	-
- Professors training courses (PDHD and PCP) per semester.	+	-	+	-

Note: + = Meaningful /Important; - = No Meaningful/No Important; +/- = Depending in each e-learning situation (can be important or not).

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